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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,284	02/02/2000	Philemon L. Bruner	BRUE:035	7307

7590

03/06/2003

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EXAMINER

SHAPIRO, JEFFERY A

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/497,284

Applicant(s)

BRUNER ET AL.

Examiner

Jeffrey A. Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 27-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 13 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in claims 1, 13 and 27 whether two or more segments hinged together form one or more downward coin races or the rejector body forms the coin races. The specification, at p.5, lines 18-21 state in part that "the rejector body (9) ...ha[s] one or more coin races formed in the rejector body therebetween."

It also appears that the characterization of "at least a portion of one of said walls in pivotal connection with at least one of said hinged segments of said coin separator and rejector body" is incorrect. What is called a portion of one of said walls appears to be physically connected to an arm, such as shown in figure 2, arm (25), where said arm appears to have an appendage at approximately a 90 degree angle to the other appendage.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-23 and 27-28, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al (US 5,769,200). Meyer et al discloses the following.

As described in Claims 1, 13, 27 and 28;

1. a coins separator (10) and rejector body (18, 20, 22, 24 and 28) having *two or more segments hinged together in pivotal connection, said hinged segments defining one or more downwardly inclined coin races formed between said hinged segments* (see figure 1); (Note that the term "hinged together" is being construed as meaning they are connected together and that each segment is hinged, meaning that it pivots. Pivoting is construed to mean that a segment moves from one plane at a particular angle to the horizontal, to a different plane, located at another angle to the horizontal. Considering this, it appears that the segments (18, 20, 22, 24 and 28) of Meyer et al appear to be "connected" together by the wall (106, for example, of figure 4) the flaps/segment pivots are journalled in. Each flap moves or pivots from one plane to the next. Therefore, it appears that Meyers et al meets the limitations of having several segments hinged together in pivotal connection. Note also that even if "hinged together in pivotal connection" is construed as **"two segments pivoting on the same shaft"**, then it can be argued that the hinged segments of Applicant and those of Meyers et al are functional equivalents of each other, performing substantially the same function in substantially the same way

with substantially the same structure. In addition, it appears that there is no particular reason in Applicants' specification for using the single shaft versus the scheme of Meyer et al.)

2. said rejector body having an upstream portion and a downstream portion;
3. said coin races further comprising a first wall and a second wall;
4. at least a portion of one of said walls in pivotal connection with at least one of said hinged segments of said coin separator and rejector body (note that it appears that the walls of Meyer et al are in contact with the hinged or swinging segments of Meyer et al (18, 20, 22, 24 and 28);
5. one or more sensors (A and B) located in said upstream portion of said *coin separator and rejector* body (note that sensor (A) is located upstream with respect to flaps (24 and 28);
6. an actuator (27) in mechanical connection with said pivotal portion of said race wall;
7. a processor (79) in electrical communication with said sensors and with said actuator;

As described in Claim 2;

8. a second sensor (A or B) located in said downstream portion of said rejector body;

As described in Claims 4-6 and 15-17;

9. said actuator is a solenoid (27);

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10. said solenoid is a latching solenoid;

11. said solenoid is a wound cap solenoid;

(Note that whether or not a latching solenoid, wound cap solenoid or basic solenoid, the apparatus of Meyer et al still has substantially the same structure and functions in substantially the same way as Applicant's apparatus.)

5. Claims 3, 7-11, 14, 18-23 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Mercurio. Meyer et al does not expressly disclose the following.

As described in Claims 12 and 23, 29 and 30;

12. a light coin spring detector positioned in the downstream portion of said rejector body;

Mercurio discloses the following.

As described in Claims, 12, 23, 29 and 30;

12. a light coin spring detector (70) positioned in the downstream portion of said rejector body (see col. 3, lines 48-68 and col. 4, lines 1-4 of Mercurio);

Both Meyer et al and Mercurio are analogous art because they both concern coin handling.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have added a light coin spring detector in the downstream passageway of the rejector body.

The suggestion/motivation would have been to provide a further layer of security to insure correctly weighted coins are allowed to pass through to the coin box. See Mercurio, abstract, last 7 lines, in particular.

Claims 3 and 14 read as follows;

13. said actuator is an electric motor;

Regarding Claims 3 and 14, note that an electric motor used as an actuator of the rejector bodies is considered to be a functional equivalent of a solenoid. It would be expedient for one ordinarily skilled in the art to use electric motors or stepper motors to actuate the rejector bodies since they may provide finer control of the rejectors or may take up less space than solenoids.

Claims 7-11 and 18-22 read as follows;

14. at least one of said sensors is an induction coil;
15. at least one of said sensors is a hall effect sensor;
16. at least one of said sensors (A) is a photoelectric sensor;
17. at least one of said sensors is an LED sensor;
18. at least one of said sensors is an IR (infrared) sensor;

Regarding Claims 7-11 and 18-22, note that induction coils, hall effect sensors, photoelectric sensors, LED sensors and IR sensors are considered to be functional equivalents of each other. It would be expedient for one ordinarily skilled in the art to

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provide any one or a combination of these sensors in order to sense coins or other items that may be jamming a coin path.

Claim 31 reads as follows.

As described in Claim 31;

19. a magnet mounted adjacent said coin race in the upstream portion of said separator and rejector body (see Pearson, figure 7, which illustrates a magnet (331)—note that it would be expedient for one ordinarily skilled in the art to provide a magnet to a coin race to effect the removal of ferrous slugs which are not legal tender);

Therefore, it would have been obvious to combine Meyer et al and Mercurio to obtain the invention as specified in Claims 3, 7-11, 14, 18-23 and 29-31.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-23 and 27-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-22 of U.S. Patent No. 5,988,349 in view of Meyer et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.
8. Claims 1-23 and 27-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-25 of U.S. Patent No. 6,155,399 in view of Meyer et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.
9. Claims 1-23 and 27-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 1 of U.S. Patent No. 5,647,470 in view of Meyer et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.
10. Claims 1-23 and 27-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application No. 09/339,011 in view of Meyer et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because they

both describe a coin separator and rejector body having one or more sensors located unstream and downstream of said rejector body, the system controlled by a processor.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

11. Applicant's arguments filed 12/24/02 have been fully considered but they are not persuasive. Applicant explains in the response, dated 12-24-02, p.7, last line and p.8, lines 1-3 that "since the coin race is formed between the hinged-together section of the rejector body, pivoting open the rejector body also pivots at least a portion of one of the race walls such that a coin within the race will drop out of the rejector body." If the wall of the race and the rejector body, which are physically connected to each other, and appear from figure 2, for example, to be formed of one piece, that this interpretation of "hinged –together" appears to allow the use of the a device such as that of Bruner '399. for example, as the portions (30, 32 and 48 are physically formed as one piece, and pivot on pivot (42), which is part of (44) and can be construed to be part of the housing. Not also that element (60) is also connected to element (30) by a spring (51), allowing both element (60) and (30) to pivot with respect to each other, while also remaining in contact. Therefore, element (60) and (30) appear to be in "hinged" relationship with each other. Other examples that might be used include Chen et al (see figures 7, noting elements 33, 35, 55 and 65) or Wei (see figure 1A, elements 24 and 26—note also elements 40, 44 and 46 as well as figures 2 and 4A-B).

Regarding Mercurio, note in col. 4, lines 4-8, that an underweight coin is caused to go in a horizontal direction, and that this appears to be a functional equivalent of

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Applicants' stopping of the coin in the raceway. Note that it would be expedient for one ordinarily skilled in the art to stop the coin, but that in any case, the coin eventually drops to a lower position, or is removed from the path where genuine coins are intended to pass. Therefore, at the very least, the underweight coin means of Mercurio is considered to be a functional equivalent of Applicants'.

Regarding the double patenting rejection against US 6,155,399, note that although no processor is directly claimed, it can be argued to be obvious or inherently necessary as one ordinarily skilled in the art would use a processor to process the information received from the sensors (25 and 33) and to coordinate the magnet arm (shown in figure 1) and a validator, for example.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamagishi et al, Turner, Hiortdahl (see elements (86, 88 and 90), Hall (see figure (37), Schreiber et al, Toolan, Kurosawa et al and Yokota et al as examples.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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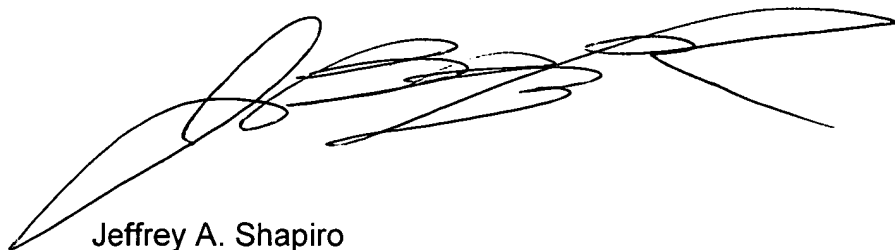
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (703)308-3423. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone numbers for the organization where this application or proceeding is assigned are (703)306-4195 for regular communications and (703)306-4195 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

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A large, stylized handwritten signature in black ink, likely belonging to Jeffrey A. Shapiro.

Jeffrey A. Shapiro
Patent Examiner,
Art Unit 3653

March 2, 2003

A small, stylized handwritten signature in black ink, likely belonging to Donald P. Walsh.

DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600